



# APQP Bumming You Out?

## Executive Briefing

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John M. Cachat

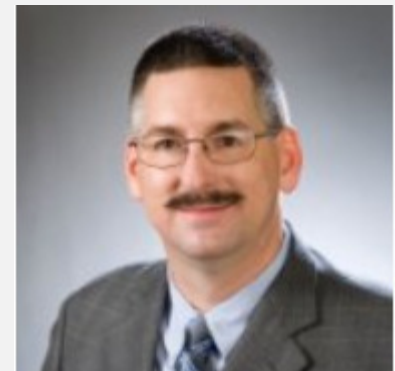
[johncachat@hotmail.com](mailto:johncachat@hotmail.com)

# Thought for the Day

“If companies used APQP as a strategic business process, they could decrease cost of poor quality and warranty costs and thereby increase profits, often a factor of 2x to 4x.”

**Scott A. Gray**

Sr. Program Manager, Quality Deployment  
at Automotive Industry Action Group



# Ford Reviews Vehicle Launch Procedures



ASQ is a global community of people passionate about quality, who use the tools, their ideas and expertise to make our world work better.

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## Ford Reviews Vehicle Launch Procedures



### **Global Insight**

May 7, 2013

Ford is overhauling its vehicle launch procedures to catch problems earlier, reports *Automotive News* quoting Joe Hinrichs, Ford president of the Americas.

"We've done a complete analysis on lessons learned in the last couple of years, including the recent MKZ launch, and are now incorporating a number of changes in our development and new-model launch process... trying to be a lot more proactive earlier in the development process to identify the issues and get in front of them," said Hinrichs.

Ford has implemented the following process improvements, among others: monthly launch reviews, including more extensive quality comparisons with competitors' vehicles; greater use of technology, including three-dimensional computer simulations, to spot potential quality problems earlier; hiring and assigning engineers at supplier plants to ensure suppliers have the capacity to keep up with the increased pace of vehicle launches and mid-cycle model changes. Ford's launch reviews now involve "global skill team leaders" from multiple disciplines such as manufacturing, product development, quality and purchasing, said Hinrichs.

[http://asq.org/qualitynews/gnt/execute/displaySetup?newsID=15940&WT.dcsvid=OTM3ODY1MTQ3NAS2&WT.mc\\_id=EM1110259](http://asq.org/qualitynews/gnt/execute/displaySetup?newsID=15940&WT.dcsvid=OTM3ODY1MTQ3NAS2&WT.mc_id=EM1110259)

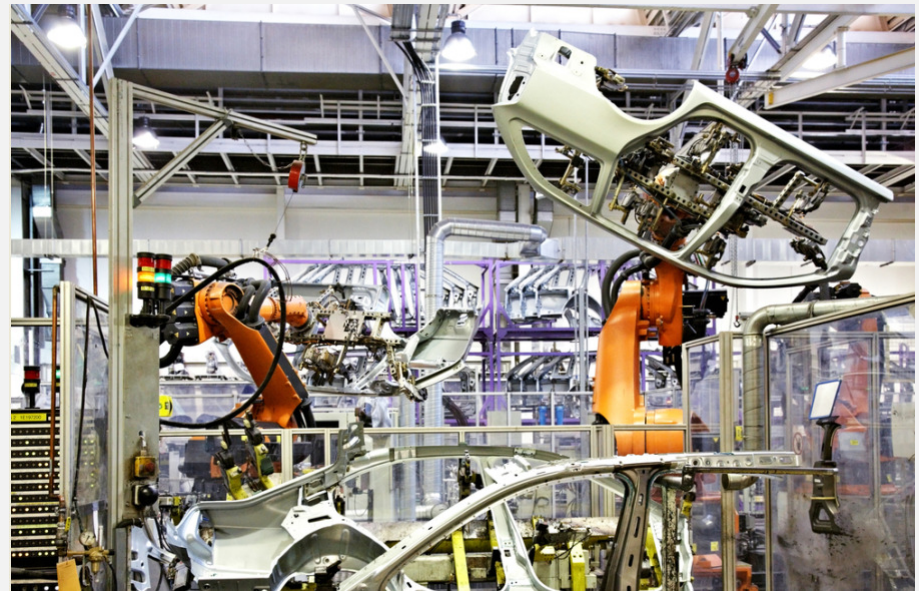
# Who Cares?

Poorly managed projects and project management offices (PMOs) failure can have dramatic consequences for management teams and the business they serve ranging from:

- ✓ Negative market perception
- ✓ Cost overruns
- ✓ Business interruption & failure
- ✓ Management gets fired
- ✓ Failure to deliver expected benefits
- ✓ Diminished customer & supplier relationships
- ✓ Good employees leave

# Today's Discussion

- APQP – The Problem
- APQP Managed Services – The Solution
- Next Steps
- Q & A



# APQP – The Business Problem

- Products are late
- Quality is unacceptable
- Resources are wasted
- Problems are repeated



# APQP – The Organizational Problem

- APQP is a Quality or Engineering thing, and not a strategic business process
- Product Launch Managers are reduced to clerks updating start and end dates that are never met and that nobody cares about
- Project Management is done with the wrong tools and/or people
  - Resources are over-scheduled
  - Issues are not resolved
  - True costs are unknown / inaccurate



# Project Management Defined

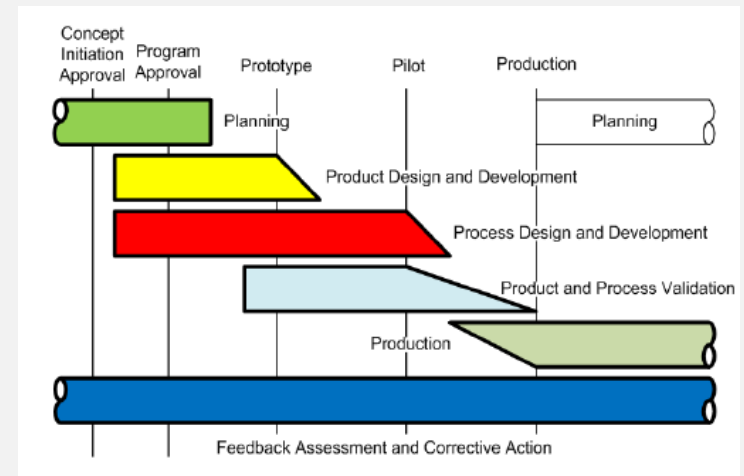
- Projects are temporary undertakings with a specific objective that are accomplished by the organized application of appropriate resources.
- Project management encompasses techniques to:
  - Propose
  - Plan
  - Implement
  - Manage
  - Evaluate projects
  - Combined with leadership to manage people





# APQP Project Management Defined

Advanced Product Quality Planning (APQP) is a **structured process**, establishing and defining the steps and requirements necessary to ensure that a **new and/or changed product and process** satisfy the expectations of the customer and the needs of your company.



# APQP - The Challenge

The project challenge in every organization is to structure and manage the components of **people**, **material resources**, **information**, **time**, and **money** to deliver a result that meets the requirements of the customer



# APQP Best Practices

- A shared cross-functional business process
- Organizational clarity of responsibilities, authority, and accountabilities for the project and the process
- Integrated master plan and integrated master schedule
- Robust risk, issues, and opportunities management
- Comprehensive change management

*Successful launch of new products is key to creating a premier customer quality experience.*

# APQP Best Practices

- A thorough and constructive phase review process
- Clear/consistent communication of project status with all stakeholders
- Concurrent engineering designed into the process
- Inclusive supply chain management
- Supports learning organization culture

*Successful launch of new products is key to creating a premier customer quality experience.*

# Successful APQP Project Teams

- Organize them to achieve timely and effective communication, coordination, and decision making.
- Communication
  - Both vertically and horizontally
  - Both push and pull



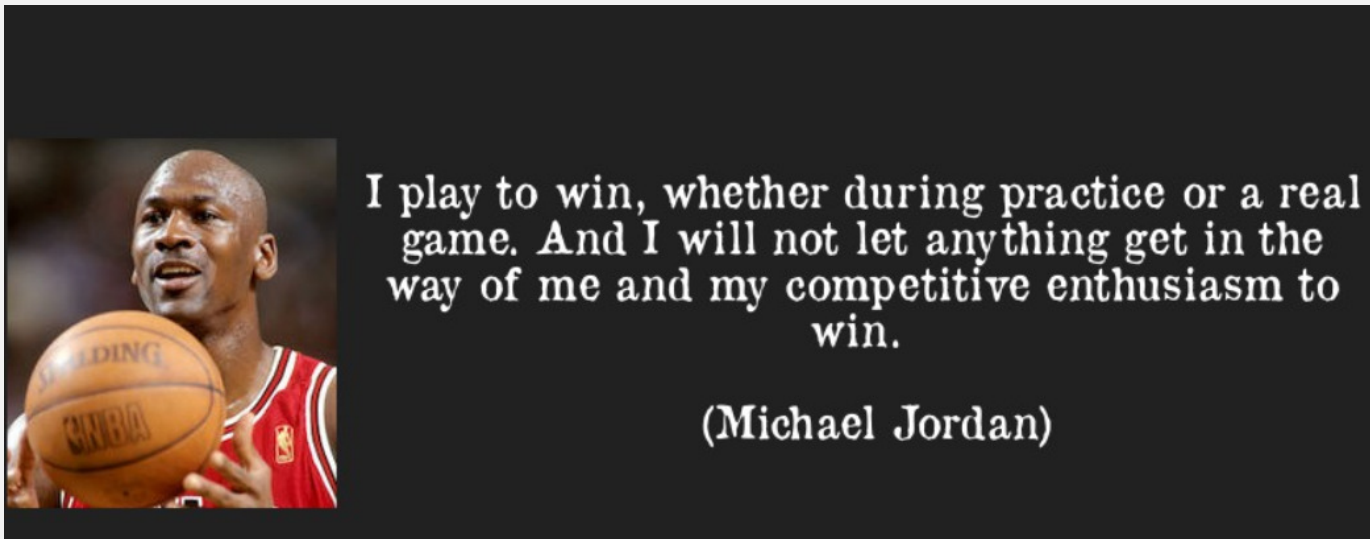
# Successful APQP Project Teams

- Coordination
  - Thousands of activities, many are interdependent
  - Complexity of program and supply chain increases need
- Decision Making
  - Empower the team leader and core team to make the right decisions on a timely basis
  - Robust phase reviews enable management to remove barriers, support direction, and keep projects aligned to business priorities

# Get in the game – this is not practice!

*Many of the problems encountered during a product launch are from people, the roles they are required to play, political issues, and comfort zones.*

- Lack a sense of urgency
- Pretend tomorrow will never come
- Assume others will bail them out
- Ignore warning signs

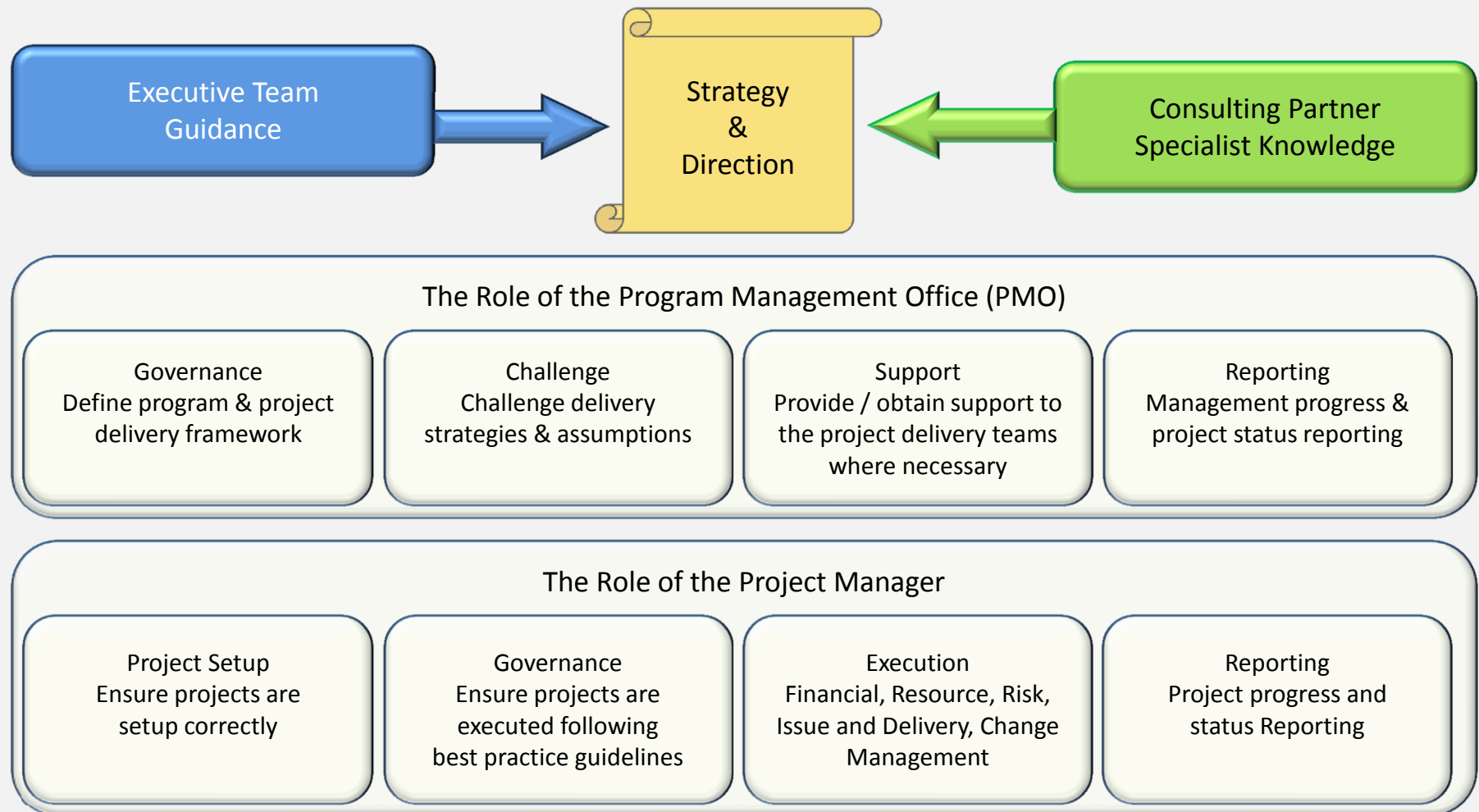


# APQP Software – What if....

- Support a comprehensive APQP business process
- Enable robust project evaluation and project planning prior to kick-off
- Provide multi-level work breakdown structure to ensure visibility of time and resource constraints
- Builds risk management into each phase of the project
- Ensures resources with right skills are available at the right time
- Brings lessons learned into future project planning
- Quality assurance is extended to all design activities
- Managed Services – off load of the administrative tasks



# What We Want - Roles & Responsibilities



# What Makes a Good Project Manager?

- Experience / Knowledge
- Makes good judgment calls
- Ability to motivate others
- Negotiation – internal and external
- Calm under pressure
- Make things happen and get things done
- Execute the project within the agreed timeframe using the resources and budget provided

# The One Reason for Failure

Disconnect between the people that buy the software (executives) and the people that use the software (project managers)



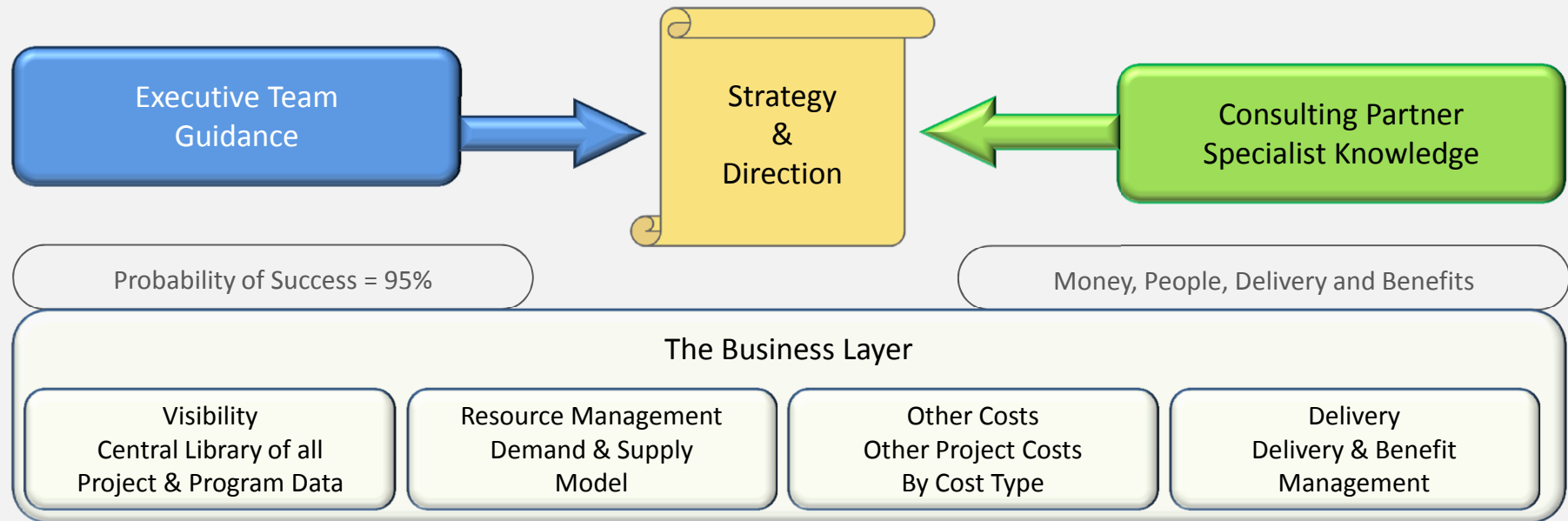
Basic Questions:

- How many people do I have?
- What are they working on?
- How busy are they?
- What are the project issues?

# What is the Result of this Disconnect?



# The Solution



**Lessons Learned...** based on decades of experience...

1. Focus on the BUSINESS OBJECTIVES that drive the PROJECT & PROGRAM DELIVERY process.
2. Avoid taking on unnecessary and impossible challenges. Recognize that project managers are different and that they have different styles. This is a people issue and not a tool issue!

# APQP Dashboard / Analytics Model

	Executive Level	Business Level	Program / Project Level
Dashboard Approach	GYR Indicators for Key Project Metrics and APQP Process Metrics	GYR Indicators for project metrics and for Business Portfolio impact on APQP Process Metrics	GYR Indicators for all project metrics
APQP Process Performance	Cycle Time and First Pass Yield for all projects combined	CT & FPY for Business Portfolio, Achievement of committed CT and FPY improvements	Process Compliance Flags
Project Performance	On Time Projects Financial Results, Customer Satisfaction	Product Line Profitability, Project Financial Metrics	On-Time Performance to Spec Project Costs
Program Issue Escalation Triggers	To Phase Gate Council Members	To Functional Managers and Business Staff	To Project Manager and Team
Drill-Down Capabilities	To Business and Project Name Level	To Phase /Task Level within projects	All project related tasks, activities, and deliverables.

# APQP Dashboard

*KeyedInProjects®*

My Work Project Scheduling Capability Scenario Executive Contacts Time Expense

APQP Project Dashboard

Name Contains  🔍

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Code	Name	Start Date	End Date	Manager Name	Life Cycle Status	Current Phase	Time	Customer	Product	Manufacturing	Supplier	Financials
PRJ017	Chi Project	11/22/2010		John Adams	🟡	Phase 5	🟢	🟡	🟡	🟡	🟢	🟢
PRJ018	Beta Project	11/22/2010		Bryan Johnson	🟢	Phase 5	🟢	🟢	🟢	🟢	🟢	🟡
PRJ019	Alpha Project	9/12/2011		Bryan Johnson	🟡	Phase 3	🟢	🟢	🟢	🟢	🟢	🟡
PRJ020	Milton Project	11/18/2011		Ryan Adams	🟢	Phase 3	🟡	🟢	🟢	🟢	🔴	🔴
PRJ022	Lambda Project	12/28/2009	9/2/2011	Ryan Adams	⚪	Phase 7	🟢	🟢	🟢	🟢	🟢	🟢

# APQP Project List

KeyedInProjects®

My Work Project Scheduling Capability Scenario Executive

Project: Chi Project [Search] [Gantt] [Calendar] [Gantt] [Edit] [Add] [Clone]

Navigation Tasks Forecasts Finance Resource Deliverables Risks Issues Change Requests

Navigation

Navigation Mode: User-defined Project List [v]

Project List: APQP Projects [v] Actions [v]

	Project Code	Project Name	Manager	
[Icon]	PRJ014	APQP Project Template - Option 3	Ryan Adams	Select
[Icon]	<b>PRJ017</b>	<b>Chi Project</b>	<b>John Adams</b>	Select
[Icon]	PRJ018	Beta Project	Bryan Johnson	Select
[Icon]	PRJ019	Alpha Project	Bryan Johnson	Select
[Icon]	PRJ020	Milton Project	Ryan Adams	Select
[Icon]	PRJ022	Lambda Project	Ryan Adams	Select



# APQP Solution – Task List

Project: Chi Project									
<div>Navigation</div> <div>Tasks</div> <div>Forecasts</div> <div>Finance</div> <div>Resource</div> <div>Deliverables</div> <div>Risks</div> <div>Issues</div> <div>Change Requests</div> <div>Communicate</div> <div>Documents</div> <div>Status Rep</div>									
<div> </div>									
ID	Task Name	Duration	Start	Finish	Effort	11/29/2010			
						S	M	T	W
1	1- Project Opportunity Analysis	55	Fri, 7 Jan 2011	Fri, 25 Mar 2011	31				
25	2- Project Planning	25	Mon, 28 Mar 2011	Fri, 29 Apr 2011	60				
50	3- Product Design & Development	164	Mon, 2 May 2011	Fri, 16 Dec 2011	130				
83	4- Process Design and Development	55	Fri, 16 Dec 2011	Fri, 2 Mar 2012	60				
Project: Chi Project									
<div>Navigation</div> <div>Tasks</div> <div>Forecasts</div> <div>Finance</div> <div>Resource</div> <div>Deliverables</div> <div>Risks</div> <div>Issues</div> <div>Change Requests</div> <div>Communicate</div> <div>Documents</div>									
<div> </div>									
ID	Task Name	Duration	Start	Finish	Effort	3/2			
						A	T	W	
1	1- Project Opportunity Analysis	55	Fri, 7 Jan 2011	Fri, 25 Mar 2011	31				
2	VOC/Market Assessment	41	Fri, 7 Jan 2011	Fri, 4 Mar 2011	20				
7	Product/Process/Supplier Assumptions	31	Fri, 7 Jan 2011	Fri, 18 Feb 2011	5				
12	Strategic Fit Assessment	10	Fri, 14 Jan 2011	Fri, 28 Jan 2011	3				
19	Phase 1- Project Phase Gate Review	10	Fri, 11 Mar 2011	Fri, 25 Mar 2011	3				
25	2- Project Planning	25	Mon, 28 Mar 2011	Fri, 29 Apr 2011	60				
26	Prelim BOM, DQR Goals, PAP	15	Mon, 28 Mar 2011	Fri, 15 Apr 2011	20				
33	Supplier Project Launch	25	Mon, 28 Mar 2011	Fri, 29 Apr 2011	20				
38	Project Launch Readiness Confirmation	10	Mon, 11 Apr 2011	Fri, 22 Apr 2011	10				
43	Phase 2- Project Phase Gate Review	10	Fri, 8 Apr 2011	Fri, 29 Apr 2011	10				
50	3- Product Design & Development	164	Mon, 2 May 2011	Fri, 16 Dec 2011	130				
51	Product Design Requirements and Plans	34	Mon, 2 May 2011	Fri, 17 Jun 2011	25				
52	Detailed Mechanical Design	20	Mon, 2 May 2011	Fri, 15 Jul 2011	20				

# Key Takeaways

BUSINESS LAYER FIRST

WHAT MAKES A GOOD  
PROJECT MANAGER?

STANDALONE XLS CAUSE  
PROBLEMS



# Thank You!

“Never dismiss the good in search of perfection”

Colin Gibbons (Aviva) 2002

“Sometimes the most difficult thing to achieve is simplicity”

Kevin Lane (Pfizer) 2009

“Do simple things well”

Eugene Blaine

# APQP Bumming You Out?

Q&A

# About Us

Proven expertise in business  
information systems

Rapid Solution  
Development™ process

## Contact

John Cachat  
jmc@peproso.com



## Services

Assess Current Status

Develop Short and Long  
Term Plans

Develop Specific Solutions  
to Your Problems

Assist in ROI Analysis

***PeProSo***

# About John M. Cachat

<http://www.linkedin.com/in/johncachat>



- **Driving Business Performance**
  - Helping companies align their business and technology
  - Focus on people, process, and then the technology
  - Subject matter expert on business process management
  - On-going research into next generation of technology for enterprise systems
- **28 years experience in enterprise systems**
  - USAF Research Project (1985)
  - Founder of enterprise quality software company (1988)
  - Chair of ASQ technical committee on computerizing quality (1992)
- **Trusted advisor to global organizations, government agencies, and professional groups**